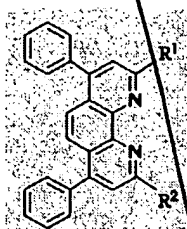


11. (New) A bathophenanthroline compound of formula (I):

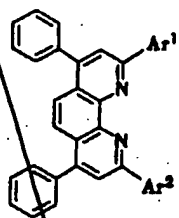


wherein  $R^1$  and  $R^2$  are derived from  $R^1$ -Li and  $R^2$ -Li respectively, and may be the same or different and independently represent a hydrocarbon group provided that at least one of  $R^1$  and  $R^2$  has at least two carbons; and wherein  $R^1$  and  $R^2$  are selected from the group consisting of an ethyl group, an n-propyl group, an isopropyl group, an n-pentyl group, an iso-pentyl group, a neopentyl group, a tert-pentyl group, a cyclopentyl group, a methycyclopentyl group, a dimethycyclopentyl group, a trimethycyclopentyl group, a tetramethycyclopentyl group, an n-hexyl group, a 2-ethylbutyl group, a 3,3-dimethylbutyl group, a cyclohexyl group, an n-cyclohexylmethyl group, an n,n-dimethycyclohexyl group, an n,n,n-trimethycyclohexyl group, a tert-octyl group, a 2-ethylheptyl group, an n-nonyl group, an n-decyl group, an n-dodecyl group, an n-tetradecyl group, an n-hexadecyl group, a benzyl group, a phenethyl group, an  $\alpha$ -methylbenzyl group, an  $\alpha,\alpha$ -dimethylbenzyl group, a 1-naphthylmethyl group, a 2-naphthylmethyl group, a furfuryl group, a 2-methylbenzyl group, a 3-methylbenzyl group, a 4-methylbenzyl group, a 4-ethylbenzyl group, a 4-isopropylbenzyl group, a 4-tert-butylbenzyl group, a 4-n-hexylbenzyl group, a 4-nonylbenzyl group, and a 3,4-dimethylbenzyl group.

12. Cancel.

13. (New) A bathophenanthroline compound adapted to be used as an organic layer having a luminescent region provided between an anode and a cathode, wherein the organic layer comprises a bathophenanthroline compound of formula :

SUB  
E2

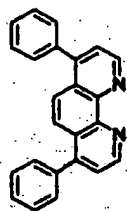


wherein Ar<sup>1</sup> and Ar<sup>2</sup> may be the same or different and independently represent an aryl group but do not form an interlocking macrocyclic compound.

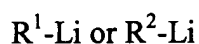
14. (New) The bathophenanthroline compound according to claim 13 wherein Ar<sup>1</sup> and Ar<sup>2</sup> are selected from the group consisting of a 1-naphthyl group, a 2-anthryl group, a 9-anthryl group, a 2-fluorenyl group, a 4-quinolyl group, a pyridyl group, a 3-pyridynyl group, a 2-pyridynyl group, a 3-furyl group, a 2-furyl group, a 3-thienyl group, a 2-oxazolyl group, a 2-thiazolyl group, a 2-benzoxazolyl group, a 2-benzothiazolyl group, a 2-benzoimidazolyl group, a 4-methyphenyl group, a 3-methyphenyl group, a 2-methyphenyl group, a n,n-dimethyphenyl group, a n,n,n-trimethyphenyl group, a n-ethyphenyl group, a n,n-diethyphenyl group, a n,n,n-triethyphenyl group, a 4-n-propylphenyl group, a n-isopropylphenyl group, a 4-n-butylphenyl group, a 4-isobutylphenyl group, a 4-sec-butylphenyl group, a n-tert-butylphenyl group.

15. Cancel.

16. (New) A process, comprising:  
(a) obtaining a bathophenanthroline of formula



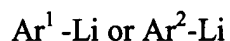
- (b) subjecting the bathophenanthroline to nucleophilic substitution reaction at the 2, 9 positions by a lithium compound of formula (III):



wherein  $R^1$  and  $R^2$  may be the same or different and independently represent a hydrocarbon group provided that at least one of  $R^1$  and  $R^2$  has at least two carbon atoms, and  $R^1$  reacts at the 2 position and  $R^2$  reacts at the 9 position of the bathophenanthroline.

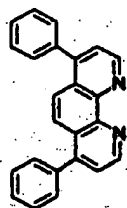
17. (New) The process according to Claim 16, wherein a carbanion is generated from the lithium compound in a solution and reacted with the bathophenanthroline during the nucleophilic substitution reaction.

18. (New) A process, comprising:  
(a) obtaining a lithium compound of formula (V):



wherein  $Ar^1$  and  $Ar^2$  may be the same or different and independently represent an aryl group,

- (b) subjecting the lithium compound to a bathophenanthroline of formula (IV):



via nucleophilic substitution reaction at the 2, 9 positions of the bathophenanthroline where  $A^1$  reacts at the 2 position and  $A^2$  reacts at the 9 position of the bathophenanthroline.

19. (New) The process according to Claim 18, wherein a carbanion is generated from the lithium compound in a solution and reacted with the bathophenanthroline during the nucleophilic substitution reaction.